

**REMARKS**

Applicants thank the Examiner for the thorough consideration given the present application. Claims 7-11, 13-23 are pending in this application. Claims 17-19 are independent. Claims 14, 17-19, and 21 are amended.

Reconsideration of this application, as amended, is respectfully requested.

**Reasons for Entry of Amendments**

At the outset, it is respectfully requested that this Amendment be entered into the Official File in view of the fact that the amendments to the claims automatically place the application in condition for allowance.

In the alternative, if the Examiner does not agree that this application is in condition for allowance, it is respectfully requested that this Amendment be entered for the purpose of appeal. This Amendment was not presented at an earlier date in view of the fact that Applicants did not fully appreciate the Examiner's position until the Final Office Action was reviewed.

**Claim for Priority**

The Examiner is requested to acknowledge Applicants' claim for foreign priority under 35 U.S.C. §119 and receipt of the certified copy of the priority document filed with the application on September 8, 2000.

**Drawings**

Applicants have not received a Notice of Draftsperson's Patent Drawing Review, Form PTO-948, indicating whether the formal drawings have been approved by the Official Draftsperson. It is respectfully submitted that the drawings comply with the requirements of the USPTO. Clarification with the next official communication is respectfully requested.

**Rejections under 35 U.S.C. §103(a)**

Claims 7, 8-11, 13-16, and 17-23 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,345,102 to Davis et al. in view of U.S. Patent No. 6,396,197 to Szilagyi et al. This rejection is respectfully traversed.

While not conceding the appropriateness of the Examiner's amendment, independent claims 17, 18, and 19 are amended herein to recite combinations of elements not disclosed or suggested by the references cited by the Examiner.

In particular, **independent claim 17** is amended herein to recite a combination of elements directed to a piezoelectric speaker, including a piezoelectric film located on a back side of the frame and covering the opening, the piezoelectric film being exposed to a front side of the frame through the opening.

Full support for the novel features claimed in claim 17 is illustrated in FIGS. 5 and 6, which clearly show the piezoelectric film 201 located on a back side of the frame 202, and the piezoelectric film 201 being exposed to a front side of the frame 202 through the opening.

Further, **independent claim 19** is amended herein to recite a combination of elements directed to a speaker system, including a frame having a center opening, the center opening extending through the frame and exposing the piezoelectric film to a person's ear.

Full support for the novel features claimed in claim 19 can be found in the specification, for example on page 6 lines 12-20. See also FIGS. 7, 8, 10, and 11 which clearly show the center opening 220, 225 extending through the frame 22a, 22b and exposing the piezoelectric film 201 to a person's ear.

In contrast to the Applicants' invention as set forth in claims 17 and 19, Davis et al. merely show piezoelectric elements 28 mounted on rectangular panel 26 having no opening, the panel being fixed to sun visor 10 such that the piezoelectric elements are hidden. See Davis et al. FIG. 2, and column 3, lines 31-32 which states "Accordingly, the piezoelectric elements 28 are hidden".

Thus, Davis et al. fail to teach or suggest a piezoelectric film covering an opening a piezoelectric film located on a back side of the frame and covering the opening, the piezoelectric film being exposed to a front side of the frame through the opening, as set forth in independent claim 17 of the present invention. Further, Davis et al. fail to teach or suggest a frame having a center opening, the center opening extending through the frame and exposing the piezoelectric film to a person's ear, as set forth in independent claim 19 of the present invention. In fact, not only do Davis et al. fail to teach or suggest the present invention, by disclosing the "piezoelectric elements 28 are hidden", the Davis et al. document explicitly teaches away from the present invention by stating that hiding the

piezoelectric elements provides “aesthetic advantages, together with providing added protection against accidental electric shock from the relatively high voltages used to drive the piezoelectric elements 28.” Column 3, lines 32-35 (emphasis added). Providing an exposed piezoelectric elements as claimed would clearly go against the teachings of Davis et al.

As set forth in MPEP 2145:

“[a] prior art reference that ‘teaches away’ from the claimed invention is a significant factor to be considered in determining obviousness.” (emphasis added).

Further, MPEP 2141.02 recites:

“A prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention.” *W.L. Gore & Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983), cert. Denied, 469 U.S. 851 (1984).

In addition, the Applicants also respectfully submit that Szilagyi et al. fail to make up for the deficiencies of Davis et al.

Thus, it is respectfully submitted that the combinations of elements set forth in the independent claims 17 and 19 as amended herein are not disclosed or made obvious by the prior art of record, including Davis et al., taken alone or in combination with Szilagyi et al.

In addition, **independent claim 18** is amended herein to recite a combination of elements directed to a piezoelectric speaker, including a piezoelectric film located on a back side of the frame and covering the opening; a laminating film attached to the back side of the frame and covering the piezoelectric film; and a fastener secured to the laminating film at a

position overlapping edges of the piezoelectric film but not overlapping the opening for detachably fastening the piezoelectric speaker to an inside of a helmet.

Full support for the novel features set forth in claim 18 can be found in the specification, for example on page 5 lines 7-11. See also FIGS. 4 and 5 which clearly show a laminating film 203 attached to the back side of the frame 202 and covering the piezoelectric film 201; and a fastener 204 secured to the laminating film at a position overlapping edges of the piezoelectric film 201 but not overlapping the opening for detachably fastening said piezoelectric speaker 10 to an inside of a helmet 1.

The Examiner concedes that Davis et al. fail to teach a detachable fastener fastening the piezoelectric speaker to a surface of the helmet. Regarding Szilagyi et al., this document merely discloses an acoustical linkage for mounting a speaker on various surfaces; however, Szilagyi et al. fail to disclose or suggest a fastener secured to the laminating film at a position overlapping edges of the piezoelectric film but not overlapping the opening for detachably fastening said piezoelectric speaker to an inside of a helmet, as set forth independent claim 18 of the present invention.

In the Office Action dated June 25, 2003, the Examiner cited Deopuria et al. as teaching a fastening material (FIG. 2b, elements 38, 42). However, nowhere in the Deopuria et al. document is there any teaching or suggestion of a fastener secured to the laminating film at a position overlapping edges of the piezoelectric film but not overlapping the opening for detachably fastening said piezoelectric speaker to an inside of a helmet, as set forth independent claim 18 of the present invention.

Thus, no combination of the references cited by the Examiner teaches or suggests the novel combination of elements set forth in independent claim 18 as amended herein.

For at least these reasons, Applicants respectfully request withdrawal of the final rejections of claims 17-19 as being unpatentable over Davis et al. in view of Szilagyi et al.

In view of the foregoing, it is respectfully submitted that independent claims 17-19 are in condition for allowance. Since the dependent claims depend directly or indirectly from allowable independent claims 17-19, they are also allowable for at least the reasons set forth above, as well as for the additional limitations provided by these claims. Note that dependent claim 14 is amended merely to correct minor typographical errors.

All claims are now in condition for allowance, and reconsideration and withdrawal of the rejection under 35 U.S.C. §103(a) are respectfully requested.

### **CONCLUSION**

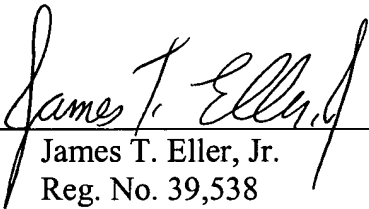
All the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicants, therefore, respectfully request that the Examiner reconsider the outstanding objection and rejection and that they be withdrawn. It is believed that a full and complete response has been made to the outstanding Office Action, and that the present application is in condition for allowance.


However, if there are any outstanding issues, the Examiner is invited to telephone Carl T. Thomsen, Reg. No. 50,786, at 703-205-8000 in an effort to expedite prosecution.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§1.16 or 1.17, particularly extension of time fees.

Respectfully submitted,

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